I. AMENDMENT

IN THE CLAIMS:

Claims 1-37. (Canceled)

Claim 38. (New) A method for obtaining the production of a fertilizable oocyte within a program of controlled ovarian stimulation for assisted reproduction techniques (COS/ART) comprising:

administering an exogenous gonadotropin to induce follicle growth,

administering a luteinizing hormone releasing hormone (LHRH) antagonist to prevent a premature LH surge, wherein the LHRH antagonist is administered in a single or dual dosage regimen of from 1 to 10 mg per dose;

whereby follicular growth occurs in the absence of a LH surge and a fertilizable oocyte is produced.

Claim 39. (New) The method of claim 38, wherein the dosage of LHRH antagonist is in the range of 2-6 mg per dose.

Claim 40. (New) The method of claim 38, wherein dosage of LHRH antagonist is 3 mg per dose.

Claim 41. (New) The method of claim 38, wherein an amount of LHRH antagonist administered in a single or dual dose is sufficient to suppress only endogenous LH, while FSH secretion is maintained at a natural level and individual estrogen development is not affected.

Claim 42. (New) The method of claim 38, wherein the LHRH antagonist is administered by subcutaneous injection.

Claim 43. (New) The method of claim 38, wherein the LHRH antagonist is administered starting cycle day 1 to 10 and ovulation occurs between day 9 and 20 of the menstruation cycle.

Claim 44. (New) The method of claim 43, wherein the LHRH antagonist is administered starting cycle day 4 to 8.

Claim 45. (New) The method of claim 43, wherein the LHRH antagonist is administered starting on cycle day 6 to 10 and ovulation occurs between day 9-16 of the menstruation cycle.

Claim 46. (New) The method of claim 43, wherein ovulation occurs within 6.5 days following administration of a single or second dose of the LHRH antagonist.

Claim 47. (New) The method of claim 43, wherein ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation.

Claim 48. (New) The method of claim 43, wherein ovulation is induced by administering a hormone or hormone agonist in order to induce ovulation.

Claim 49. (New) The method of claim 43, wherein ovulation is induced by administering a hormone or hormone agonist selected from the group consisting of native LH, recombinant LH, an LHRH agonist, and HCG.

Claim 50. (New) The method of claim 38, wherein the LHRH antagonist is Cetrorelix.

Claim 51. (New) A method for obtaining the production of a fertilizable oocyte within a program of COS/ART comprising:

administering human menopausal gonadotropin (HMG) to induce follicle growth, and

administering Cetrorelix to prevent a premature LH surge, wherein Cetrorelix is subcutaneously administered in a single or dual dosage regimen of from 1 to 10 mg per dose;

whereby follicular growth occurs in the absence of a LH surge and a fertilizable oocyte is produced.

Claim 52. (New) The method of claim 49, wherein the dosage of LHRH antagonist is in the range of 2-6 mg per dose.

Claim 53. (New) The method of claim 51, wherein the dosage of LHRH antagonist is 3 mg per dose.

Claim 54. (New) The method of claim 51, wherein an amount of LHRH antagonist administered in a single or dual dose is sufficient to suppress only endogenous LH, while FSH secretion is maintained at a natural level and individual estrogen development is not affected.

Claim 55. (New) The method of claim 51, wherein the LHRH antagonist is administered starting cycle day 1 to 10 and ovulation occurs between day 9 and 20 of the menstruation cycle.

Claim 56. (New) The method of claim 55, wherein the LHRH antagonist is administered starting cycle day 4 to 8.

Claim 57. (New) The method of claim 55, wherein Cetrorelix is administered starting on cycle day 6 to 10 and ovulation occurs between day 9-16 of the menstruation cycle.

Claim 58. (New) The method of claim 55, wherein ovulation occurs within 6.5 days following administration of a single or second dose of Cetrorelix.

Claim 59. (New) The method of claim 55, wherein ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation.

Claim 60. (New) The method of claim 55, wherein ovulation is induced by administering a hormone or hormone agonist selected from the group consisting of native LH, recombinant LH, an LHRH agonist, and HCG.

Claim 61. (New) An improved method for obtaining the production of a fertilizable oocyte within a program of COS/ART comprising:

administering an exogenous gonadotropin to induce follicle growth;

administering an LHRH antagonist to prevent a premature LH surge;

whereby follicular growth occurs in the absence of a LH surge and a fertilizable oocyte is produced;

wherein the improvement comprises administering the LHRH antagonist in a single or dual dosage regimen of from 1 to 10 mg per dose.

Claim 62. (New) The improved method of claim 61, wherein the dosage of LHRH antagonist is in the range of 2-6 mg per dose.

Claim 63. (New) The improved method of claim 61, wherein the dosage of LHRH antagonist is 3 mg per dose.

Claim 64. (New) The improved method of claim 61, wherein an amount of LHRH antagonist administered in a single or dual dose is sufficient to suppress only endogenous LH, while FSH secretion is maintained at a natural level and individual estrogen development is not affected.

Claim 65. (New) The improved method of claim 61, wherein the LHRH antagonist is administered by subcutaneous injection.

Claim 66. (New) The improved method of claim 61, wherein the LHRH antagonist is administered starting cycle day 1 to 10 and ovulation occurs between day 9 and 20 of the menstruation cycle.

Claim 67. (New) The improved method of claim 66, wherein the LHRH antagonist is administered starting cycle day 4 to 8.

Claim 68. (New) The improved method of claim 66, wherein the LHRH antagonist is administered starting on cycle day 6 to 10 and ovulation occurs between day 9-16 of the menstruation cycle.

Claim 69. (New) The improved method of claim 66, wherein ovulation occurs within 6.5 days following administration of a single or second dose of the LHRH antagonist.

Claim 70. (New) The improved method of claim 66, wherein ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation.

Claim 71. (New) The improved method of claim 66, wherein ovulation is induced by administering a hormone or hormone agonist selected from the group consisting of native LH, recombinant LH, an LHRH agonist, and HCG.

Claim 72. (New) The improved method of claim 61, wherein the LHRH antagonist is Cetrorelix.

Claim 73. (New) The improved method of claim 61 comprising:

administering human menopausal gonadotropin (HMG) to induce follicle growth; and

administering Cetrorelix to prevent a premature LH surge;

wherein the improvement comprises subcutaneously administering Cetrorelix in a single or dual dosage regimen of from 1 to 10 mg per dose.

Claim 74. (New) The improved method of claim 73, wherein the dosage of Cetrorelix is in the range of 2-6 mg per dose.

Claim 75. (New) The improved method of claim 73, wherein the dosage of LHRH antagonist is 3 mg per dose.

Claim 76. (New) The improved method of claim 73, wherein an amount of LHRH antagonist administered in a single or dual dose is sufficient to suppress only endogenous LH, while FSH secretion is maintained at a natural level and individual estrogen development is not affected.

Claim 77. (New) The improved method of claim 73, wherein the LHRH antagonist is administered starting cycle day 1 to 10 and ovulation occurs between day 9 and 20 of the menstruation cycle.

Claim 78. (New) The improved method of claim 77, wherein the LHRH antagonist is administered starting cycle day 4 to 8.

Claim 79. (New) The improved method of claim 77, wherein Cetrorelix is administered starting on cycle day 6 to 10 and ovulation occurs between day 9-16 of the menstruation cycle.

Claim 80. (New) The improved method of claim 77, wherein ovulation occurs within 6.5 days following administration of a single or second dose of Cetrorelix.

Claim 81. (New) The improved method of claim 77, wherein ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation.

Claim 82. (New) The improved method of claim 77, wherein ovulation is induced by administering a hormone or hormone agonist selected from the group consisting of native LH, recombinant LH, an LHRH agonist, and HCG.

Claim 83. (New) A method for obtaining the production of a fertilizable oocyte within a program of controlled ovarian stimulation for assisted reproduction techniques (COS/ART) comprising

administering an exogenous gonadotropin to induce follicle growth,

administering a luteinizing hormone releasing hormone (LHRH) antagonist to prevent a premature LH surge, wherein the LHRH antagonist is administered in a dosage regimen of daily doses of 0.25 mg/day for multiple days;

whereby follicular growth occurs in the absence of a LH surge and a fertilizable oocyte is produced.

Claim 84. (New) The method of claim 83, wherein the LHRH antagonist is administered by subcutaneous injection.

Claim 85. (New) The method of claim 83, wherein the LHRH antagonist is administered starting cycle day 1 to 10 and ovulation occurs between day 9 and 20 of the menstruation cycle.

Claim 86. (New) The method of claim 85, wherein the LHRH antagonist is administered starting cycle day 4 to 8.

Claim 87. (New) The method of claim 83, wherein a daily dose of the LHRH antagonist is administered for from 3 to 14 days.

Claim 88. (New) The method of claim 83, wherein a daily dose of the LHRH antagonist is administered for from 3 to 7 days.

Claim 89. (New) The method of claim 85, wherein ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation.

Claim 90. (New) The method of claim 85, wherein ovulation is induced by administering a hormone or hormone agonist selected from the group consisting of native LH, recombinant LH, an LHRH agonist, and HCG.

Claim 91. (New) The method of claim 83, wherein the LHRH antagonist is Cetrorelix.

Claim 92. (New) A method for obtaining the production of a fertilizable oocyte within a program of COS/ART comprising:

administering human menopausal gonadotropin (HMG) to induce follicle growth, and

administering Cetrorelix to prevent a premature LH surge, wherein Cetrorelix is subcutaneously administered in a dosage regimen of daily doses of 0.25 mg per day for multiple days;

whereby follicular growth occurs in the absence of a LH surge and a fertilizable oocyte is produced.

Claim 93. (New) The method of claim 92, wherein Cetrorelix is administered starting cycle day 1 to 10 and ovulation occurs between day 9 and 20 of the menstruation cycle.

Claim 94. (New) The method of claim 93, wherein Cetrorelix is administered starting cycle day 4 to 8.

Claim 95. (New) The method of claim 93, wherein a daily dose of Cetrorelix is administered for from 3 to 14 days.

Claim 96. (New) The method of claim 93, wherein a daily dose of Cetrorelix is administered for from 3 to 7 days.

Claim 97. (New) The method of claim 93, wherein ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation.

Claim 98. (New) The method of claim 93, wherein ovulation is induced by administering a hormone or hormone agonist selected from the group consisting of native LH, recombinant LH, an LHRH agonist, and HCG.

Claim 99. (New) An improved method for obtaining the production of a fertilizable oocyte within a program of controlled ovarian stimulation for assisted reproduction techniques (COS/ART) comprising

administering an exogenous gonadotropin to induce follicle growth, and

administering a luteinizing hormone releasing hormone (LHRH) antagonist to prevent a premature LH surge,

whereby follicular growth occurs in the absence of a LH surge and a fertilizable oocyte is produced;

wherein the improvement comprises administering the LHRH antagonist in a dosage regimen of daily doses of 0.25 mg per day for multiple days.

Claim 100. (New) The improved method of claim 99, wherein the LHRH antagonist is administered by subcutaneous injection.

Claim 101. (New) The improved method of claim 99, wherein the LHRH antagonist is administered starting cycle day 1 to 10 and ovulation occurs between day 9 and 20 of the menstruation cycle.

Claim 102. (New) The improved method of claim 101, wherein the LHRH antagonist is administered starting cycle day 4 to 8.

Claim 103. (New) The improved method of claim 101, wherein a daily dose of the LHRH antagonist is administered for from 3 to 14 days.

Claim 104. (New) The improved method of claim 101, wherein a daily dose of the LHRH antagonist is administered for from 3 to 7 days.

Claim 105. (New) The improved method of claim 101, wherein ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation.

Claim 106. (New) The improved method of claim 101, wherein ovulation is induced by administering a hormone or hormone agonist selected from the group consisting of native LH, recombinant LH, an LHRH agonist, and HCG.

Claim 107. (New) The improved method of claim 99, wherein the LHRH antagonist is Cetrorelix.

Claim 108. (New) The improved method of claim 99, comprising:

administering human menopausal gonadotropin (HMG) to induce follicle growth, and

administering Cetrorelix to prevent a premature LH surge;

wherein the improvement comprises subcutaneously administering Cetrorelix in a dosage regimen of daily doses of 0.25 mg per day for multiple days;

whereby follicular growth occurs in the absence of a LH surge and a fertilizable oocyte is produced.

Claim 109. (New) The improved method of claim 108, wherein Cetrorelix is administered starting cycle day 1 to 10 and ovulation occurs between day 9 and 20 of the menstruation cycle.

Claim 110. (New) The improved method of claim 109, wherein Cetrorelix is administered starting cycle day 4 to 8.

Claim 111. (New) The improved method of claim 109, wherein a daily dose of Cetrorelix is administered for from 3 to 14 days.

Claim 112. (New) The improved method of claim 109, wherein a daily dose of Cetrorelix is administered for from 3 to 7 days.

Claim 113. (New) The improved method of claim 109, wherein ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation.

Claim 114. (New) The improved method of claim 109, wherein ovulation is induced by administering a hormone or hormone agonist selected from the group consisting of native LH, recombinant LH, an LHRH agonist, and HCG.

Claim 115. (New) A method for obtaining the production of a fertilizable oocyte within a program of assisted reproduction techniques comprising:

allowing normal follicular growth and development to proceed in the absence of stimulation by an exogenous gonadotropin;

administering a luteinizing hormone releasing hormone (LHRH) antagonist in a single or dual dosage regimen that prevents a premature LH surge;

whereby follicular growth and development proceeds in the absence of a LH surge and a fertilizable oocyte is produced.

Claim 116. (New) The method of claim 115, wherein the LHRH antagonist is administered by subcutaneous injection.

Claim 117. (New) The method of claim 115, wherein the LHRH antagonist is administered starting cycle day 1 to 10 and ovulation occurs between day 9 and 20 of the menstruation cycle.

Claim 118. (New) The method of claim 117, wherein the LHRH antagonist is administered starting cycle day 4 to 8.

Claim 119. (New) The method of claim 117, wherein the LHRH antagonist is administered starting on cycle day 6 to 10 and ovulation occurs between day 9 to 16 of the menstruation cycle.

Claim 120. (New) The method of claim 117, wherein ovulation occurs within 6.5 days following administration of a single or second dose of the LHRH antagonist.

Claim 121. (New) The method of claim 117, wherein ovulation occurs normally, without the administration of a hormone or hormone agonist to induce ovulation.

Claim 122. (New) The method of claim 117, wherein ovulation is induced by administering a hormone or hormone agonist in order to induce ovulation.

Claim 123. (New) The method of claim 117, wherein ovulation is induced by administering a hormone or hormone agonist selected from the group consisting of native LH, recombinant LH, an LHRH agonist, and HCG.

Claim 124. (New) The method of claim 115, wherein the LHRH antagonist is selected from the group consisting of Ganirelix, Antarelix, Antide, Azaline B, Ramorelix, A-76154, Nal-Glu, 88-88, Cetrorelix, a structure-truncated peptide with LHRH-antagonistic activity, a peptidomimetic with LHRH-antagonistic activity, and a bicyclic LHRH-analog with antagonistic activity.

Claim 125. (New) The method of claim 124, wherein the LHRH antagonist is a peptidomimetic with LHRH-antagonistic activity selected from the group consisting of D-23980 and D-24824.

Claim 126. (New) The method of claim 124, wherein the LHRH antagonist is Cetrorelix.

Claim 127. (New) The method of claim 115, wherein a fertilizable oocyte is produced within a program of extracorporeal fertilization by sperm injection.

Claim 128. (New) The method of claim 115, wherein a fertilizable oocyte is produced within a program of extracorporeal fertilization by *in vitro* fertilization.